10023452 "10030401

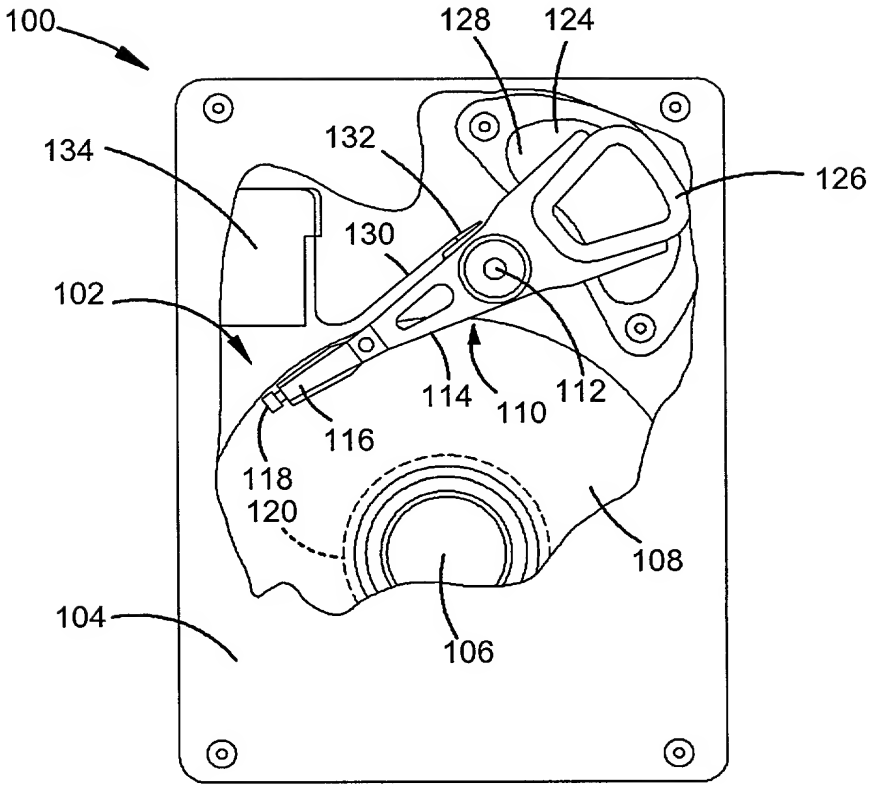

FIG. 1

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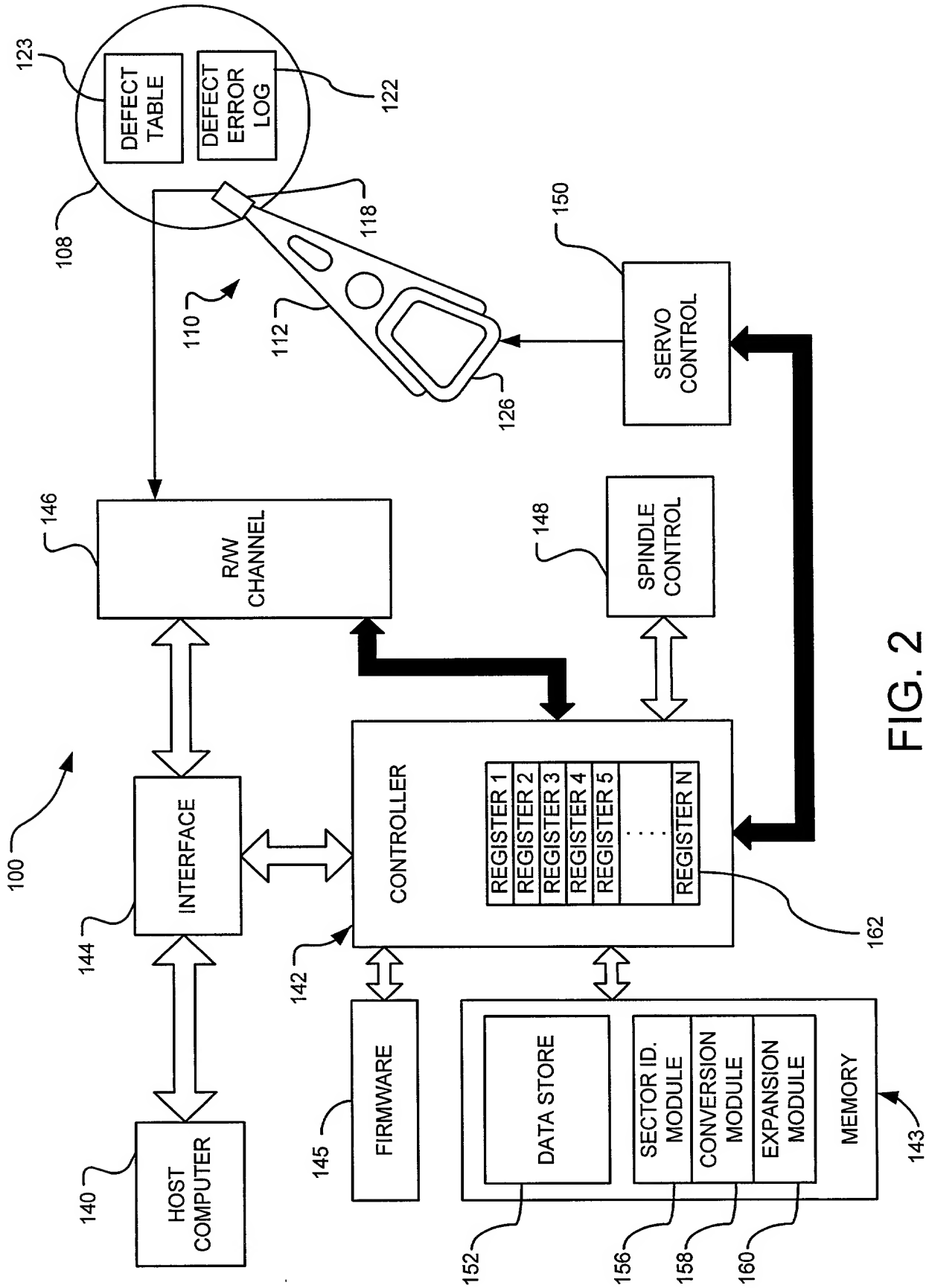

FIG. 2

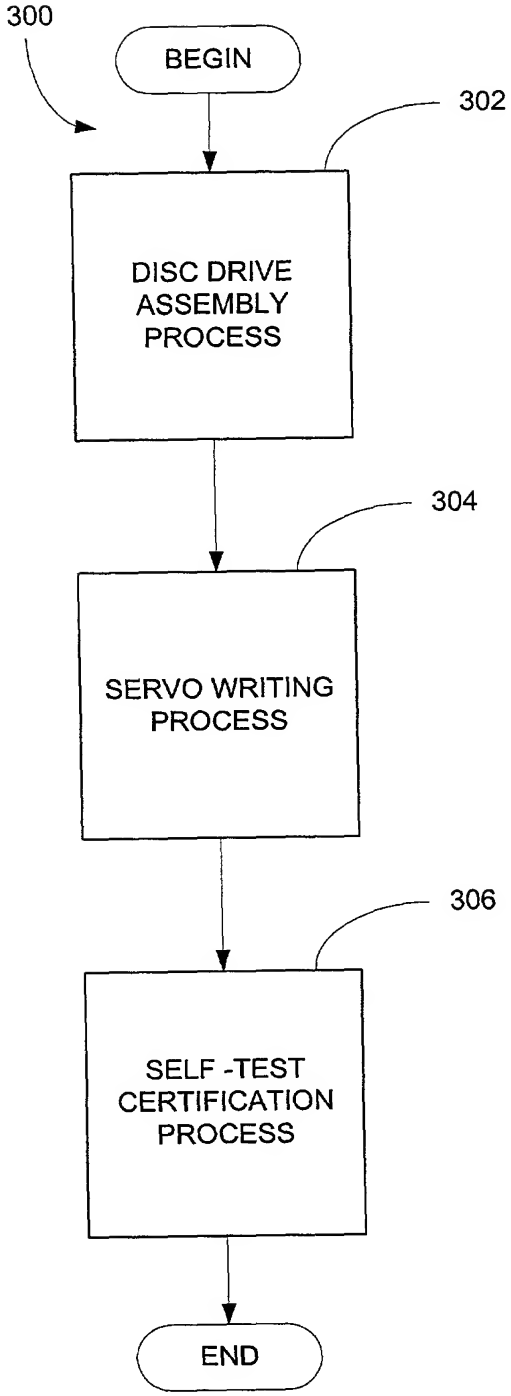
300
BEGIN
302
DISC DRIVE ASSEMBLY PROCESS
304
SERVO WRITING PROCESS
306
SELF -TEST CERTIFICATION PROCESS
END

FIG. 3

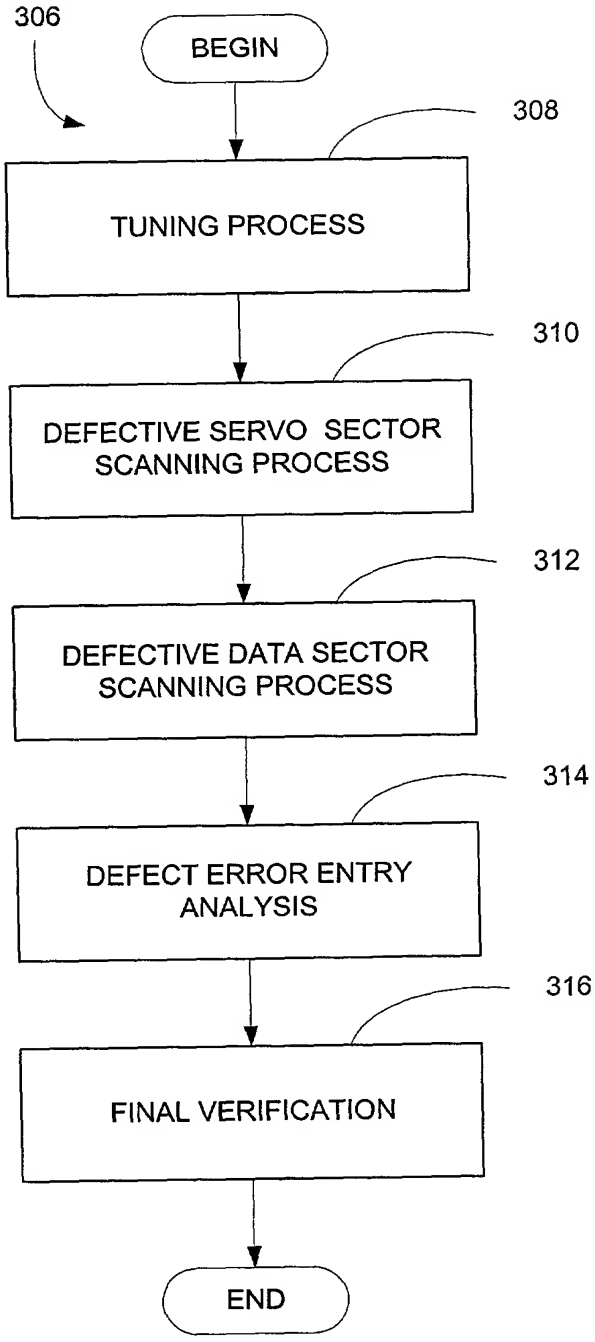
306
BEGIN
308
TUNING PROCESS
310
DEFECTIVE SERVO SECTOR SCANNING PROCESS
312
DEFECTIVE DATA SECTOR SCANNING PROCESS
314
DEFECT ERROR ENTRY ANALYSIS
316
FINAL VERIFICATION
END

FIG. 4

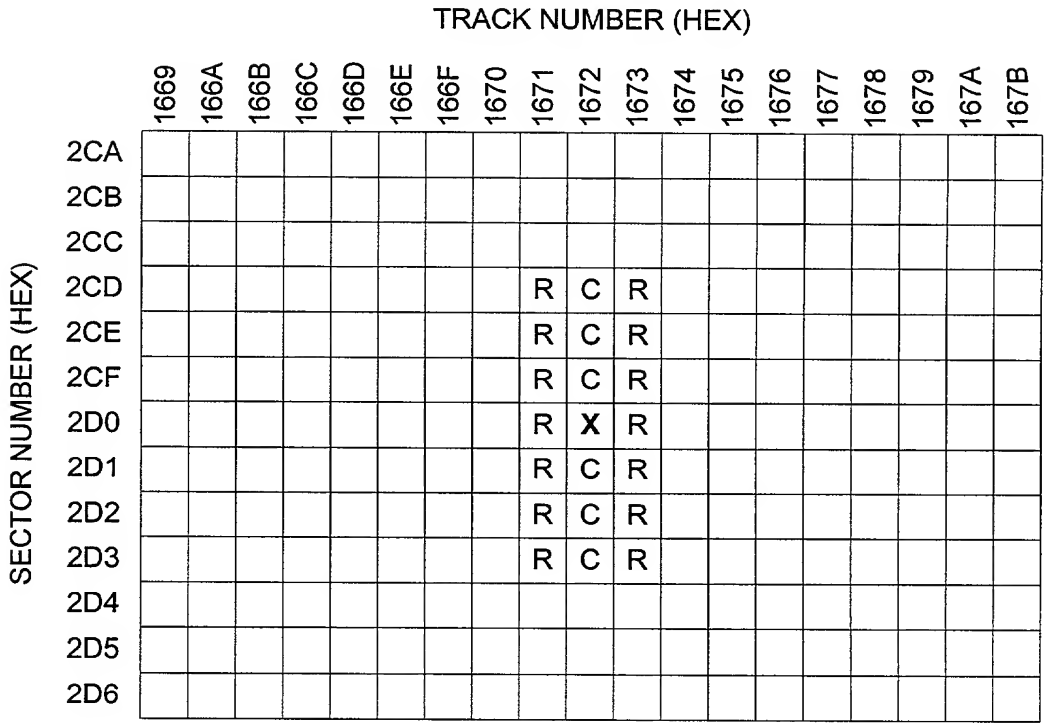
TRACK NUMBER (HEX)
1669 166A 166B 166C 166D 166E 166F 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 167A 167B
SECTOR NUMBER (HEX)
2CA
2CB
2CC
2CD R C R
2CE R C R
2CF R C R
2D0 R X R
2D1 R C R
2D2 R C R
2D3 R C R
2D4
2D5
2D6

FIG. 5

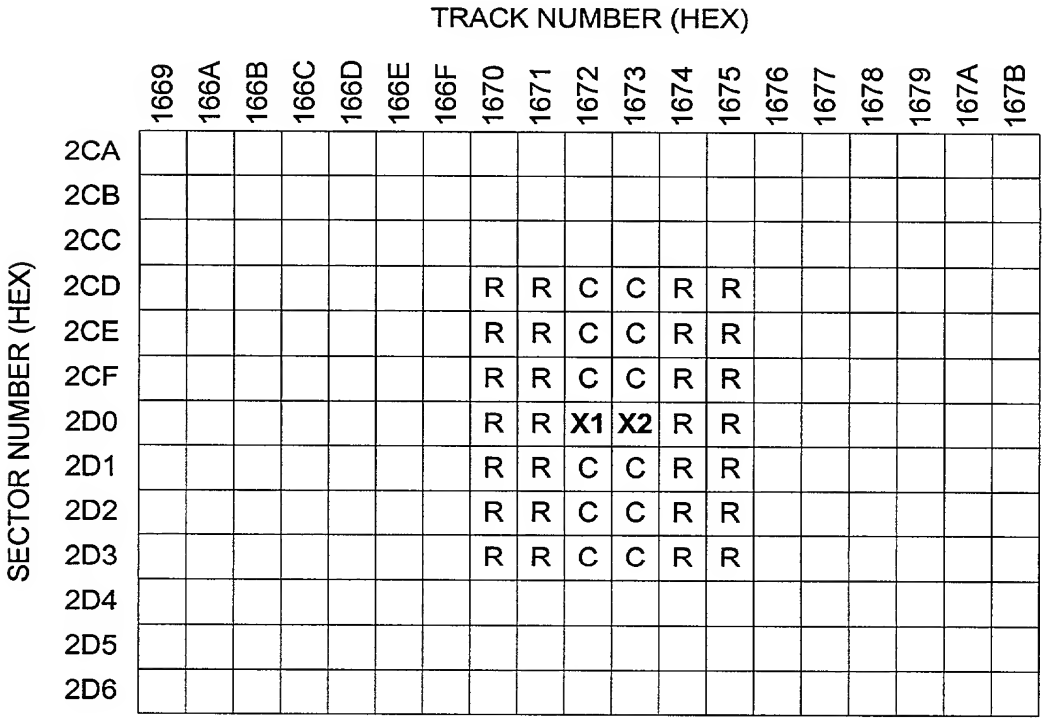
TRACK NUMBER (HEX)
1669 166A 166B 166C 166D 166E 166F 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 167A 167B
SECTOR NUMBER (HEX)
2CA
2CB
2CC
2CD R R C C R R
2CE R R C C R R
2CF R R C C R R
2D0 R R X1 X2 R R
2D1 R R C C R R
2D2 R R C C R R
2D3 R R C C R R
2D4
2D5
2D6

FIG. 6

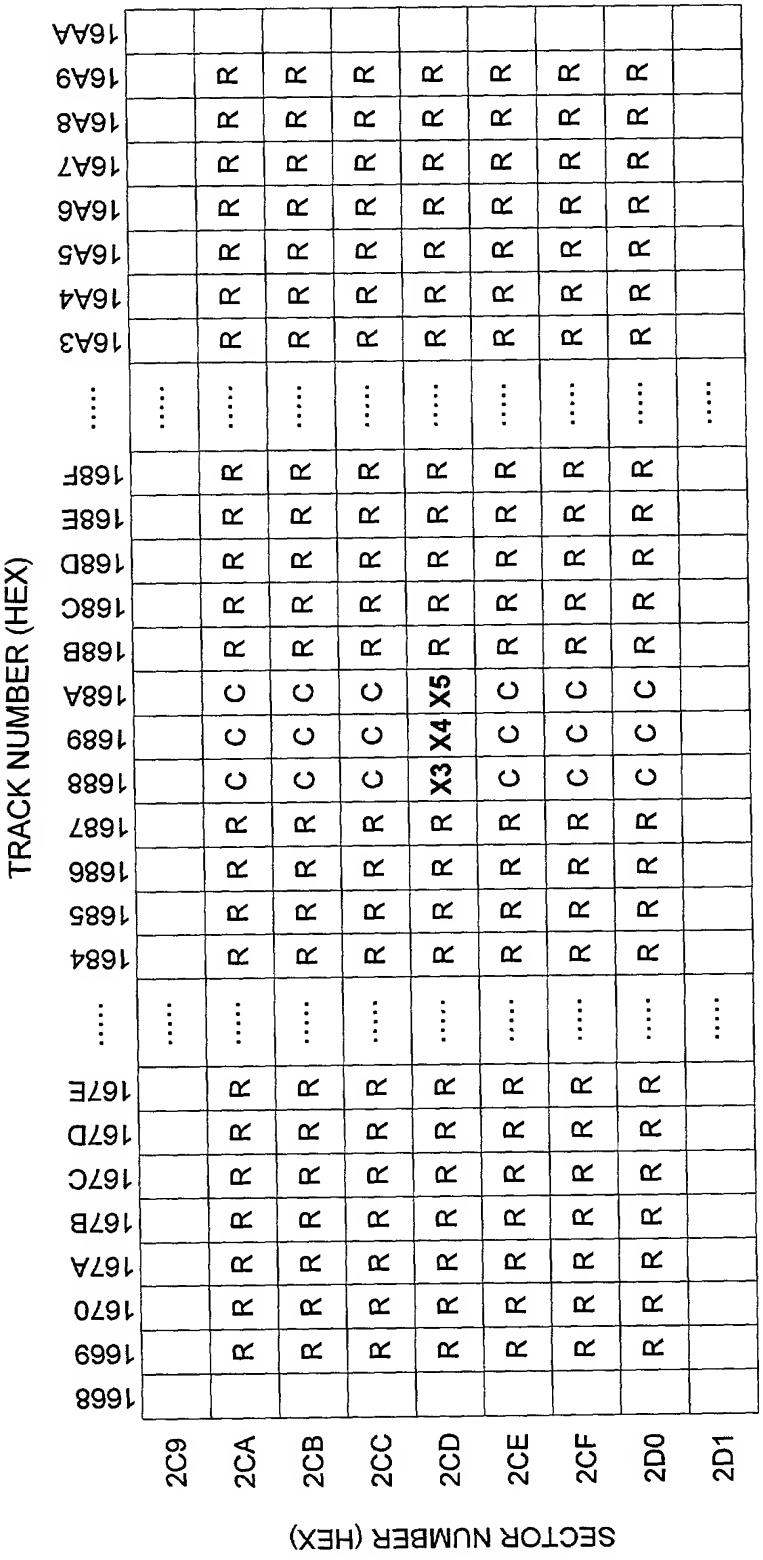
TRACK NUMBER (HEX)
SECTOR NUMBER (HEX)
2C9
2CA
2CB
2CC
2CD
2CE
2CF
2D0
2D1
X3
X4
X5

FIG. 7

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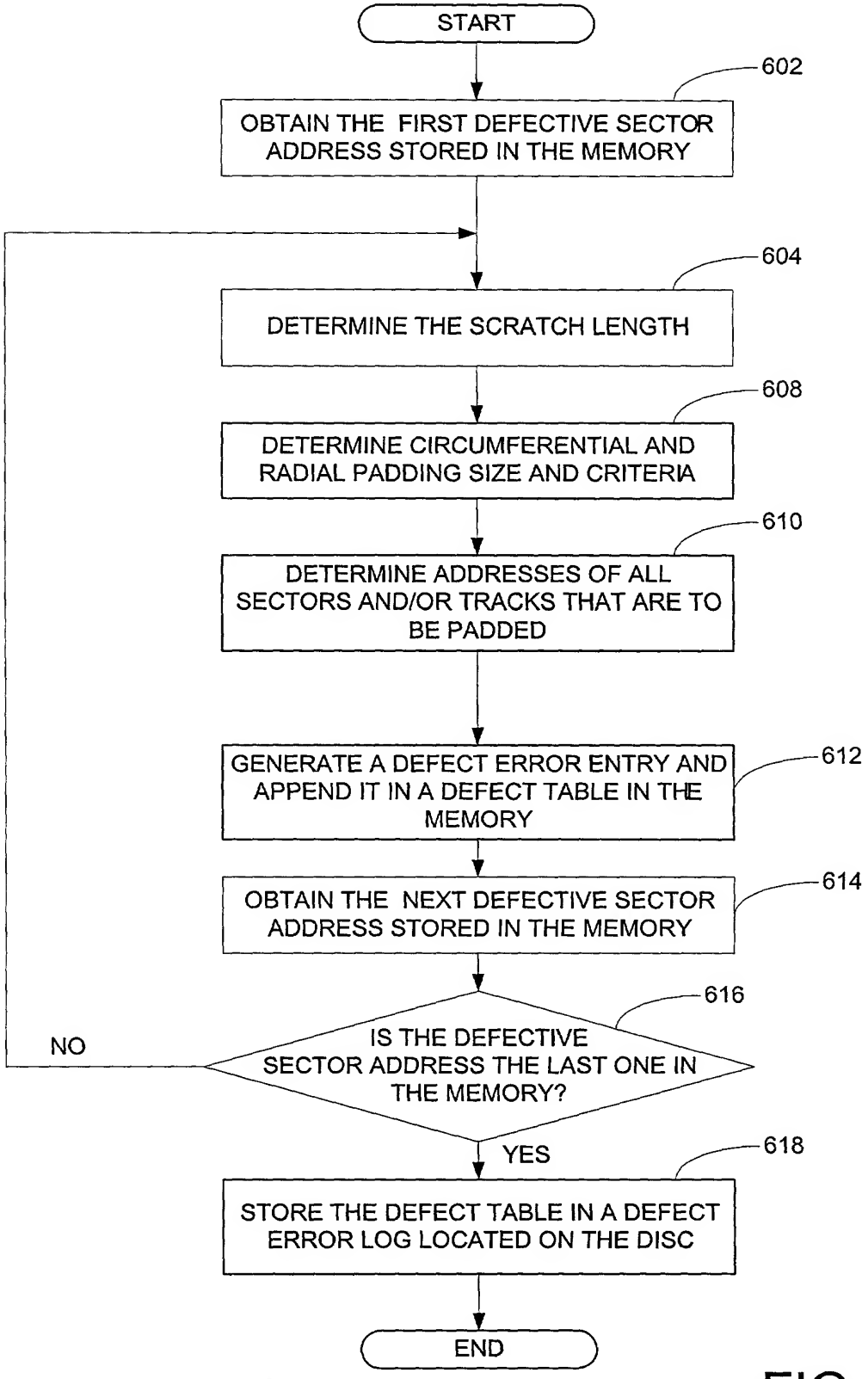

FIG. 8

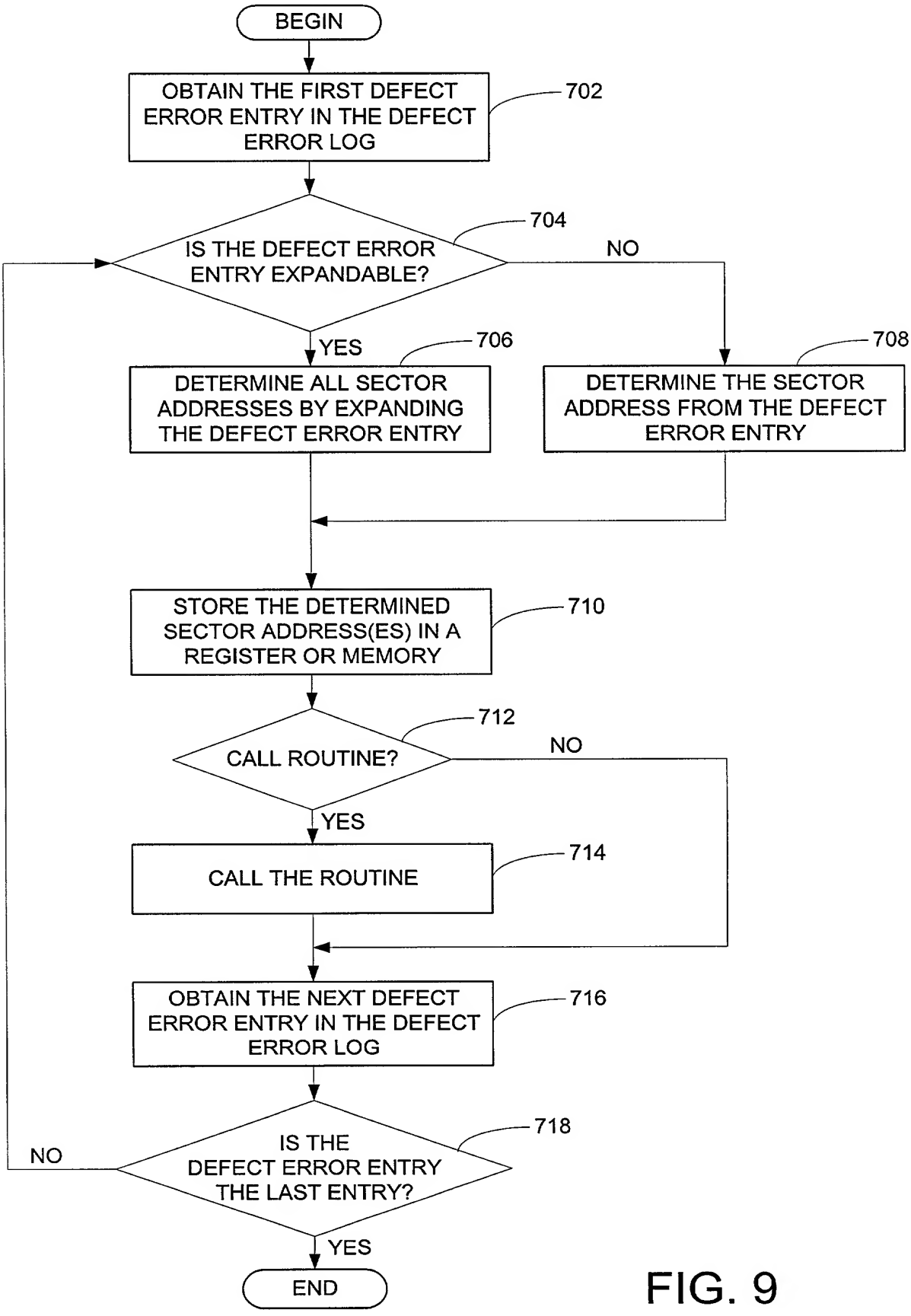
BEGIN
OBTAIN THE FIRST DEFECT ERROR ENTRY IN THE DEFECT ERROR LOG
702
IS THE DEFECT ERROR ENTRY EXPANDABLE?
704
NO
YES
DETERMINE ALL SECTOR ADDRESSES BY EXPANDING THE DEFECT ERROR ENTRY
706
DETERMINE THE SECTOR ADDRESS FROM THE DEFECT ERROR ENTRY
708
STORE THE DETERMINED SECTOR ADDRESS(ES) IN A REGISTER OR MEMORY
710
CALL ROUTINE?
712
NO
YES
CALL THE ROUTINE
714
OBTAIN THE NEXT DEFECT ERROR ENTRY IN THE DEFECT ERROR LOG
716
IS THE DEFECT ERROR ENTRY THE LAST ENTRY?
718
NO
YES
END

FIG. 9

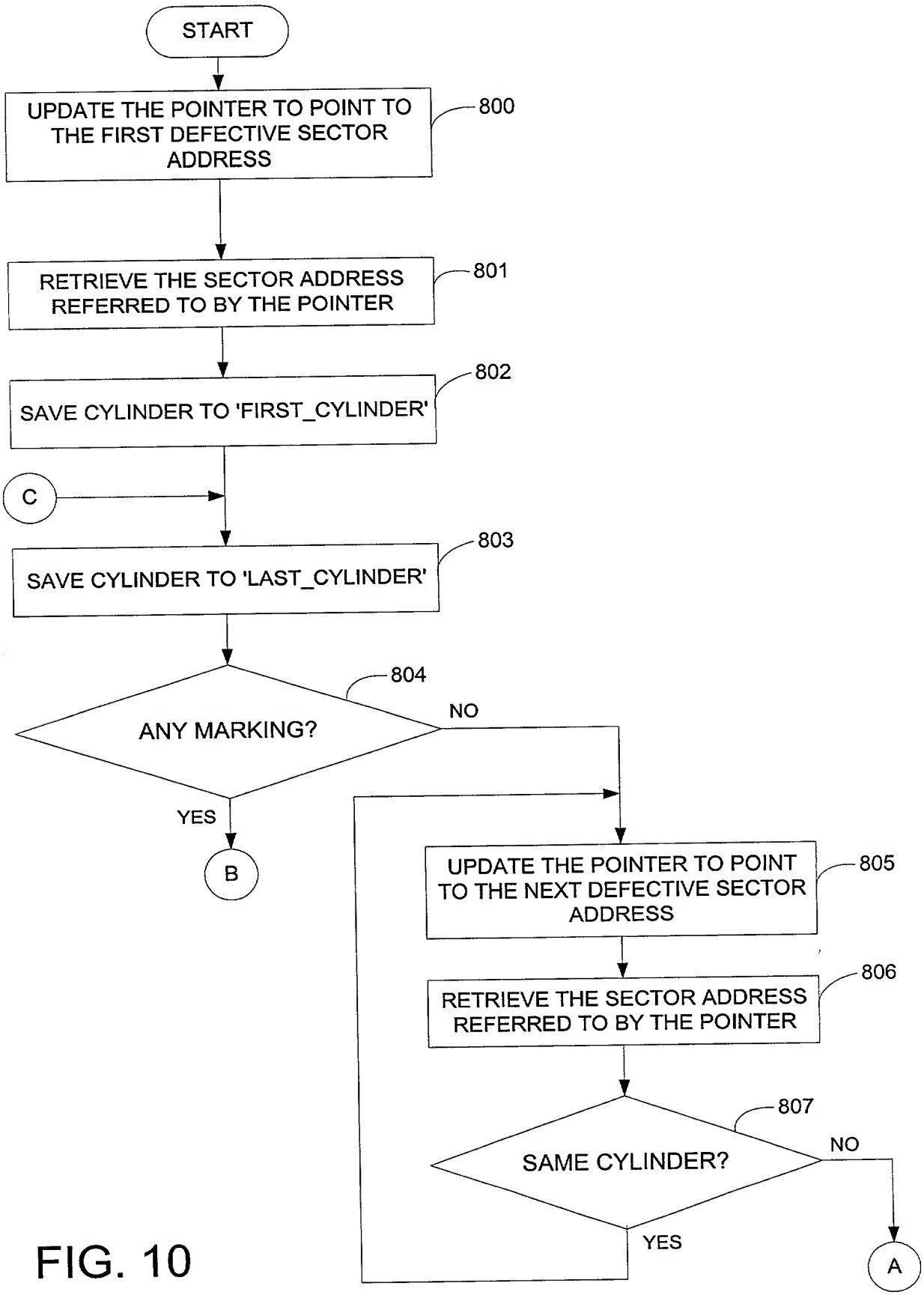
START
UPDATE THE POINTER TO POINT TO THE FIRST DEFECTIVE SECTOR ADDRESS
800
RETRIEVE THE SECTOR ADDRESS REFERRED TO BY THE POINTER
801
SAVE CYLINDER TO 'FIRST_CYLINDER'
802
C
SAVE CYLINDER TO 'LAST_CYLINDER'
803
ANY MARKING?
804
NO
YES
B
UPDATE THE POINTER TO POINT TO THE NEXT DEFECTIVE SECTOR ADDRESS
805
RETRIEVE THE SECTOR ADDRESS REFERRED TO BY THE POINTER
806
SAME CYLINDER?
807
NO
YES
A

FIG. 10

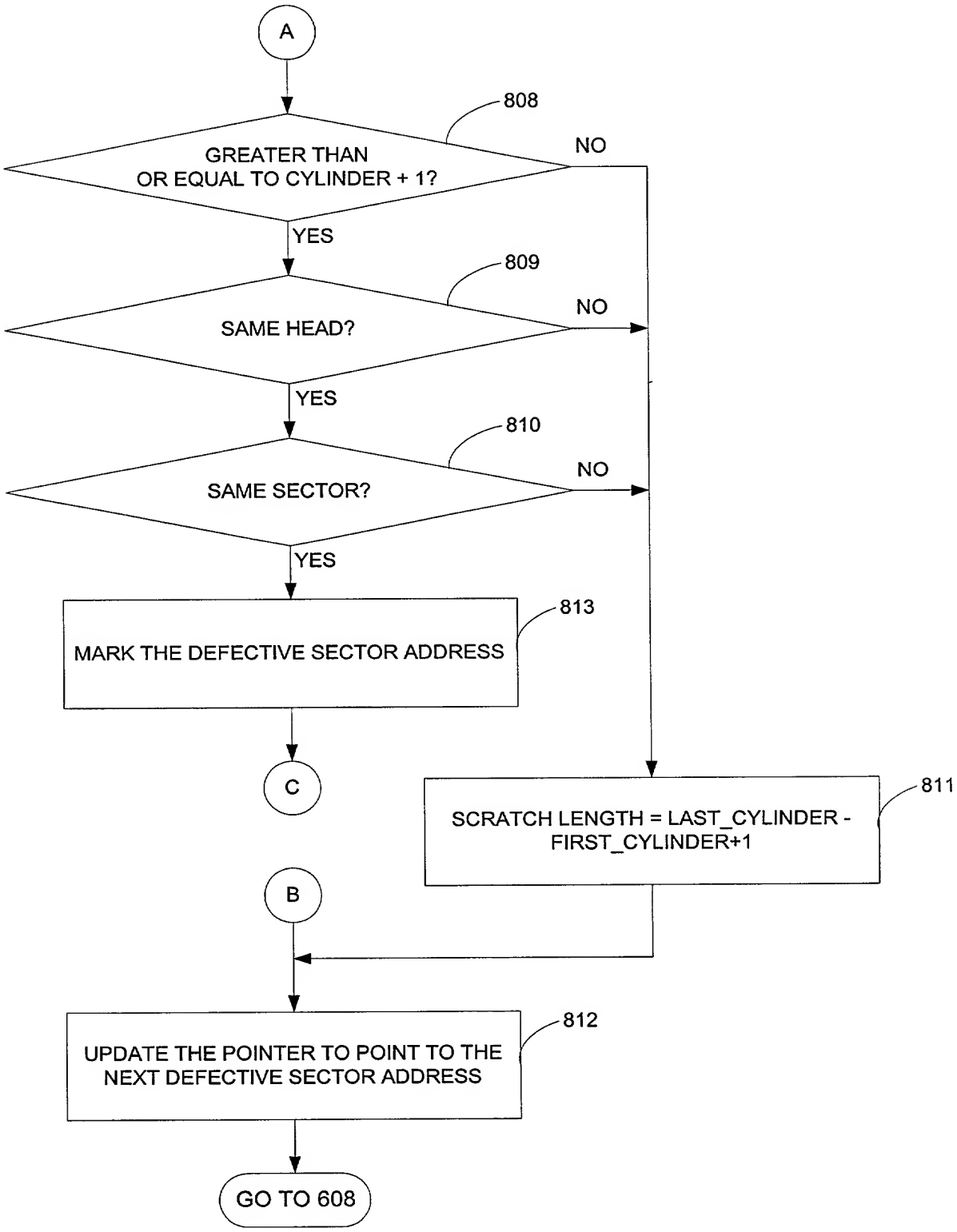
A
808
GREATER THAN OR EQUAL TO CYLINDER + 1?
NO
YES
809
SAME HEAD?
NO
YES
810
SAME SECTOR?
NO
YES
813
MARK THE DEFECTIVE SECTOR ADDRESS
C
811
SCRATCH LENGTH = LAST_CYLINDER - FIRST_CYLINDER+1
B
812
UPDATE THE POINTER TO POINT TO THE NEXT DEFECTIVE SECTOR ADDRESS
GO TO 608

FIG. 11